REMARKS

Applicant respectfully requests reconsideration of the rejections in the Office Action dated January 8, 2008 in view of the following remarks. Claim 23 has been cancelled by way of the current Amendment. Accordingly, claims 15-22 and 24-28 are currently pending for examination, with claims 15 and 24 being in independent form.

Claim Objection

Claim 23 has been objected for being of improper dependent form as independent claim 15 already includes a limitation as to a keyboard. Claim 23 has been cancelled by way of the current Amendment. Applicant respectfully requests that the objection be withdrawn.

Rejection under 35 U.S.C. § 102(b)

Claims 15-28 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,210,689 to Baker et al. (hereinafter "Baker"). This rejection is respectfully traversed.

The present invention, as defined by independent claim 15, is directed to a device for voicing phonemes, which includes a keyboard, which keyboard includes at least one support structure and a plurality of keys connected to the support structure, wherein each key of at least a number of keys is designated with at least one linguistic symbol, an electronic processing unit connected to the keyboard for recording keystrokes, and sound-producing means connected electronically to the processing unit. The processing unit is provided with conversion means for converting at least one recorded keystroke into a signal for a phoneme corresponding to the linguistic symbol of this at least one keystroke. The sound-producing means are adapted for voicing the phoneme.

Further, the present invention, as defined by independent claim 24, is directed to a method for voicing phonemes, including the steps of: A) a user pressing at least one key, B) a processing unit recording the keystroke, C) converting the keystroke into a signal for a phoneme corresponding with the keystroke, and D) acoustically producing the phoneme.

Baker discloses a system for inputting a plurality of polysemous icon symbols to access stored morphemes, words, phrases, or sentences corresponding to an icon sequence. The system includes a keyboard having a plurality of keys with icons imprinted thereon, a

microcomputer system 6, a speaker 18 and a visual display 7. The system allows for the automatic selection of a plurality of modes such that a user can enter morphemes, words, phrases, or sentences sequentially, thus allowing for continuous text or speech generation with a minimal number of input keystrokes by the user. Please note Figs. 3 and 4, the Abstract, column 8, lines 42-46, column 11, lines 5-21, column 14, lines 1-22 and column 15, lines 10-37 of Baker.

Applicant submits that a claim is anticipated under § 102 only if each and every element as set forth in the claim is found, either expressly or inherently, in a single prior art reference. MPEP § 2131. Applicant submits that the disclosure in Baker is not sufficient to anticipate independent claims 15 or 24 under § 102.

Claim 15 presently recites, *inter alia*, specific claim language as to "the processing unit is provided with conversion means for converting at least one recorded keystroke into a signal for a phoneme corresponding to the linguistic symbol of this at least one keystroke." Further, claim 24 presently recited, *inter alia*, specific claim language as to a step of "converting the keystroke into a signal for a phoneme corresponding with the keystroke." Applicant submits that Akira does not teach or suggest the above-detailed claimed subject matter.

A phoneme is defined as "the smallest phonetic unit in a language that is capable of conveying a distinction in meaning, as the *m* of *mat* and the *b* of *bat*." "phoneme." *The American Heritage® Dictionary of the English Language, Fourth Edition.* Houghton Mifflin Company, 2004. 04 Jun. 2008. Dictionary.com http://dictionary.reference.com/browse/phoneme.

According to the Examiner, Baker teaches a microcomputer system (6) that includes a conversion means (specialized processor, 12) for converting at least one recorded keystroke into a signal for a phoneme corresponding to the linguistic symbol of the at least one keystroke. Applicant respectfully disagrees.

Baker teaches a device for converting a sequence of keystrokes into a signal corresponding to a morpheme, word or sentence. A morpheme is defined as "a meaningful linguistic unit consisting of a word, such as *man*, or a word element, such as *-ed* in *walked*, that cannot be divided into smaller meaningful parts." "morpheme." *The American Heritage® Dictionary of the English Language, Fourth Edition.* Houghton Mifflin Company, 2004. 04 Jun. 2008. Dictionary.com http://dictionary.reference.com/browse/morpheme.

Specifically, Baker teaches a system for speech or text synthesis that utilizes a keyboard having a plurality of pictorial symbol and grammar symbol icons as well as alpha/numeric characters.

The system of Baker operates in three simultaneously operating modes. The first mode is using a short sequence of icons to generate a morpheme, word or sentence. For instance, a sequence of keys of the "apple" icon, the "clock" icon and the noun icon will generate a sentence along the lines of "We eat LUNCH at about 11:35 (the time on the "clock" icon)." Please note column 10, line 61 to column 12, line 5 of Baker.

The second mode is using word prediction based upon a character input or a string of character inputs to generate a set of possible morphemes, words or sentences that the user is attempting to enter. The user may then select the desired morpheme, word or sentence from a list. Please note Fig. 3 and column 16, line 38 to column 19, line 5.

In the third mode, the user simply keys in the desired text. However, even when simply inputting text, the system is also engaging in symbol sequence identification and modified word prediction. A sequence of keystrokes is stored until a preprogrammed icon sequence is recognized or the user selects a word or phrase from the word prediction list. A character string is stored but not output until a delimiter key such as the "space" key or a punctuation key is pressed by the user. Please note Figs. 5a-5c and column 19, line 6 to column 24, line 60.

Thus, the system disclosed by Baker is specifically designed for the output of a morpheme, word, phrase, sentence, etc., through the use of symbol sequences, word prediction and character string entries, which assist a disabled person generate synthetic speech or text with a minimal number of keystrokes. Please note column 26, line 28 to column 27, line 3. The system disclosed by Baker does not convert recorded keystrokes into a signal for a phoneme corresponding to the linguistic symbol of the at least one keystroke.

This stands in stark contrast to the present invention, which includes a processing unit provided with conversion means for converting at least one recorded keystroke into a signal for a phoneme corresponding to the linguistic symbol of the at least one keystroke. Such a device is highly useful for teaching children, illiterate persons and non-native language speakers to read and write and to verbalize in a particular language. The device according to the claimed invention accomplishes this purpose by outputting individual phonemes, as opposed to morphemes or completed words, to a sound-producing means,

which is adapted to voice an individual phoneme, and preferably, though not necessary, for voicing words. The system disclosed by Baker does not output signals corresponding to phonemes and is not particularly suited to training users to read and write in a particular language. At no point does Baker teach or suggest "converting the keystroke into a signal for a phoneme corresponding with the keystroke" or means for doing so, as is currently claimed. The rejection is therefore improper.

Applicant submits that claims 15 and 24 are allowable for at least the foregoing reasons, as the teachings of the prior art of record are not sufficient to overcome the deficiencies in the teachings of Baker with respect to claims 15 and 24. Applicant respectfully requests that the rejection be withdrawn.

Claims 16-22 and 25-28 are dependent upon independent claims 15 and 24 and are allowable for at least the same reasons as claims 15 and 24.

Conclusion

Based on the foregoing amendments and remarks, reconsideration of the rejections and allowance of claims 15-22 and 24-28 are requested.

Respectfully submitted,
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